WHAT IS CLAIMED IS:

1. An article comprising

a substrate comprising silicon;

a bond coat on the substrate, the bond coat comprising silicon;

an intermediate coat on the bond coat, the intermediate coat comprising at least one of tantalum aluminate and niobium aluminate; and

a top coat on the intermediate coat.

2. The article of claim 1, wherein at least one of tantalum aluminate and niobium aluminate comprises about 95 to about 100 mol % of the intermediate coat.

3. The article of claim 1, wherein the intermediate coat further comprises alumina.

4. The article of claim 3, wherein the alumina is present from about 0.1 to about 5 mol%.

5. The article of claim 1, wherein the intermediate coat further comprises at least one of tantalum oxide and niobium oxide.

6. The article of claim 5, wherein at least one of tantalum oxide and niobium oxide is present in about 0.1 to about 5 mol%.

7. The article of claim 1, wherein the intermediate coat consists essentially of at least one of tantalum aluminate and niobium aluminate.

8. The article of claim 1, wherein the intermediate coat is substantially inert to SiO_2 at temperatures greater than 1000 °C.

9. The article of claim 1, wherein the coefficient of thermal expansion of the intermediate coat is within about twenty percent of the coefficient of thermal expansion of the top coat.

10. The article of claim 1, wherein the top coat comprises barium strontium aluminosilicate.

11. The article of claim 1, wherein the substrate comprises at least one of silicon carbide and silicon nitride.

12. The article of claim 11, wherein the substrate comprises at least one of silicon carbide and silicon nitride dispersed in a matrix material.

13. The article of claim 1, wherein the substrate comprises a silicon carbide matrix.

14. The article of claim 1, wherein the substrate comprises a silicon carbide reinforcement in a silicon carbide matrix.

15. The article of claim 1, wherein the substrate comprises a silicon carbide reinforcement in a silicon/silicon carbide matrix.

16. The article of claim 1, wherein the article is a component of a gas turbine engine.

17. The article of claim 1, further comprising a layer of silica between the bond coat and the intermediate coat.

18. A method of making an article comprising

applying a bond coat comprising silicon to a substrate comprising silicon;

applying an intermediate coat on the bond coat, the intermediate coat comprising at least one of tantalum aluminate and niobium aluminate; and

applying a top coat on the intermediate coat.

19. The method of claim 18, wherein the intermediate coat is applied by thermal spraying.

20. The method of claim 18, wherein the intermediate coat consists essentially of at least one of tantalum aluminate or niobium aluminate.

21. The method of claim 18, wherein the top coat comprises barium strontium aluminosilicate.

22. The method of claim 18, further comprising applying a layer of silica between the bond coat and the intermediate coat.

23. An article comprising

a substrate comprising silicon;

a bond coat on the substrate, the bond coat comprising silicon;

an intermediate coat;

a layer comprising silica between the bond coat and the intermediate coat; and

a top coat on the intermediate coat, wherein the intermediate coat resists a solid-state subsurface reaction between the intermediate coat and the silica.